

ABSTRACT OF THE DISCLOSURE

A method of erasing data of a nonvolatile semiconductor memory unit includes the first step of collectively applying a preliminary write pulse to memory transistors, the second step of repeating, up to a first erased state, an operation of collective application of a first erase pulse to the memory transistors with change of intensity of the first erase pulse in second and subsequent application operations of the first erase pulse, the third step of repeating, up to a recovered state, an operation of collective application of a write pulse to the memory transistors with change of intensity of the write pulse in second and subsequent application operations of the write pulse, the fourth step of repeating, up to a second erased state, an operation of collective application of a second erase pulse to the memory transistors with change of intensity of the second erase pulse in second and subsequent application operations of the second erase pulse and the fifth step of repeating a selective recovery operation on the memory transistors until the memory transistors are not in an overerased state.